



Southwestern pine forests likely to disappear

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A new study, led by Los Alamos National Laboratory's Nathan McDowell, suggests that widespread loss of a major forest type, the pine-juniper woodlands of the Southwestern U.S., could be wiped out by the end of this century due to climate change, and that conifers throughout much of the Northern Hemisphere may be on a similar trajectory. New results, reported in the journal *Nature Climate Change*, suggest that global models may underestimate predictions of forest death.

McDowell and his large international team strove to provide the missing pieces of understanding tree death at three levels: plant, regional and global. The team rigorously developed and evaluated multiple process-based and empirical models against experimental results, and then compared these models to results from global vegetation models to examine independent simulations. They discovered that the global models simulated mortality throughout the Northern Hemisphere that was of similar magnitude, but much broader spatial scale, as the evaluated ecosystem models predicted for in the Southwest.

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